



## BULLETIN

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## A Portable Scientific High-Resolution Echo Sounder from SIMRAD

The Simrad EY200 (see Figure 1) is a new family of portable echo sounders designed for scientific applications. Of particular note is the fact that quantitative measurements of sound pressure levels

EY200P  
Combined in a  
splashproof carrying case

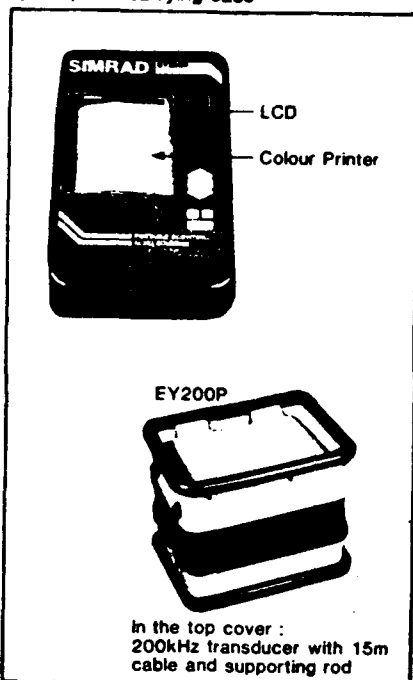


Figure 1. The Simrad EY200 components.

are available for output via serial and parallel data lines as well as being presented directly on a color graphics printer. Design accuracy is 0.2 dB at any depth. The sounder has been ruggedized for easy transportability and use on small vessels. Input lines for printing of digital navigation and timing information on the depth recorder are provided. Control of the system is through a simple six-key pad which operates a series of menus on a liquid crystal display. In addition to the menu system, the liquid crystal display can be operated to display either a section of the echogram, or in an A-scope mode (echoscope) to display individual pulse returns, or to display digital data inputs (see Figure 2). The color graphics recorder can also display a split image, with the lower portion showing an expanded record of the 5 m nearest the bottom with color-coded bottom signal strength.

The system can operate on either 24 Vdc or 110/220 Vac (50/60 Hz). Output power is maximum 1000 W using available transducers of 27, 38, 49 or 70 kHz, or 500 W using transducers of 120 or 200 kHz. Transducers may be hull-mounted, towed, or mounted

on booms. A Time Varying Gain system can be programed by the user for fresh water, salt water, or user-specified attenuation ( $x \log r$  where  $10 < x < 40$ ). The envelope TVG is designed to present point sources of the same size at the same signal strength regardless of depth (see Figure 3 [overleaf]). A separate bottom TVG controls the bottom window.

## DTIC QUALITY INSPECTED

LCD 256 x 64 pixels

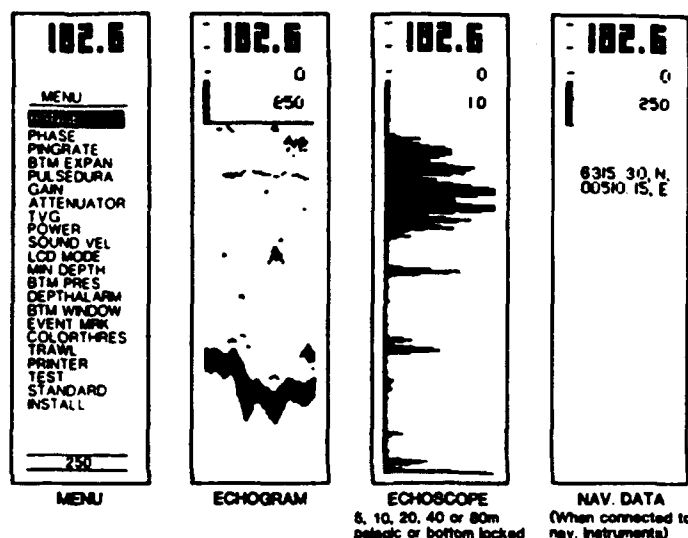


Figure 2. EY200 displays.

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For further information contact SIMRAD Subsea A/S, Strandpromenaden 50, P.O. Box 111, N-3191 Horten, Norway

ONREUR point of contact: Dr. J.E. Andrews, Scientific Director.

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